

KERBEROS REALM

Clients / Users



Key Distribution Center



Authentication
Server



Ticket Granting
Server

Services



Messages



Authenticators



Tickets



User



Authentication Server

Name/ID	Client Secret Key
Hilda	z & w \ H 9 8 _ R Q k y
Rob	B q 4 s % K " ? j 7 g R
Stella	[p = 3 Z] X 4] < e T
Tess	j 8 q] 7 > 9 N Q 6 U _

Message from User to Authentication Server

Attributes

User Name/ID (Rob)

- Service Name/ID (CRM)
- User IP address (1|N|null)
- Requested lifetime for TGT

User's Password Salt Ver #
letmein rob@realm.com kvno

Hashing Function

string2Key

Client Secret Key



Attributes

- TGS Name/ID
- Timestamp
- Lifetime (Same as TGT)

• TGS Session Key

Ticket Granting Ticket



TGS Secret Key

Attributes

- User Name/ID (Rob)
- TGS Name/ID
- Timestamp
- User IP address (1|N|null)
- Lifetime for TGT

• TGS Session Key

Message from User to Authentication Server

Messages from Authentication Server to User

Attributes

User Name/ID (Rob)

- Service Name/ID (CRM)
- User IP address (1|N|null)
- Requested lifetime for TGT



User

AS

TGS

Messages from User to Ticket Granting Server

Ticket Granting Ticket



TGS Secret Key

Attributes

- User Name/ID (Rob)
- TGS Name/ID
- Timestamp
- User IP address (1|N|null)
- Lifetime for TGT
-  TGS Session Key

Attributes

- Service Name/ID (CRM)
- Requested lifetime for ticket

User Authenticator



TGS Session Key

Attributes

- User Name/ID (Rob)
- Timestamp

User

AS


TGS

Messages from Ticket Granting Server to User



TGS Session Key

Attributes

- **Service Name/ID** (CRM)
- Timestamp
- Lifetime (Same as TGT)
-  **Service Session Key**

Service Ticket



Service Secret Key

Attributes

- **User Name/ID** (Rob)
- **Service Name/ID** (CRM)
- Timestamp
- User IP address (1|N|null)
- Lifetime for Service Ticket
-  **Service Session Key**

Key Distribution Center



Authentication Server

Name/ID	Client Secret Key
Hilda	z&w\H98_RQky
Rob	Bq4s%K"?j7gR
Stella	[p=3Z]X4]<eT
Tess	j8q]7>9NQ6U_



Ticket Granting Server


Service ID	Service Secret Key
CRM	\$`Sy9n8x~{\,
Finance	c#4FMzG!"Ve-
Payroll	'7"\$T:]Paq@V
Travel	5Qk&,svW\$4@E

TGS Cache

User Authenticator


Attributes

- **User Name/ID** (Rob)
- Timestamp

User**AS****TGS****Service**Messages from **User** to **Service****Service Ticket** **Service Secret Key**

Attributes

- **User Name/ID** (Rob)
- **Service Name/ID** (CRM)
- Timestamp
- User IP address (Optional)
- Lifetime for Service Ticket
-  **Service Session Key**

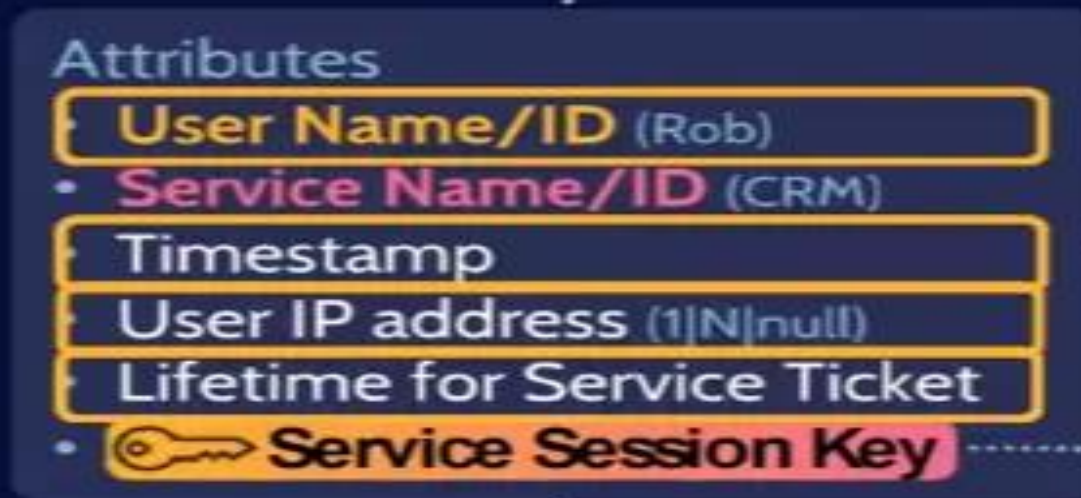
User Authenticator **Service Session Key**

Attributes

- **User Name/ID** (Rob)
- Timestamp



Service Ticket



User Authenticator



Service Secret Key

